



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

September 11, 2008

NC Division of Water Quality
Transportation Permitting Unit
2321 Crabtree Boulevard, Suite 250
Raleigh, North Carolina 27604

ATTN: Mr. Brian Wrenn

Dear Sir,

Subject: Tar - Pamlico Riparian Buffer Authorization Request for the proposed replacement of Bridge No. 52 over Deep Creek on SR 1505, in Edgecombe County. Federal Aid Project No. BRZ-1505(3), WBS Element 33735.1.1, **TIP No. B-4504.**

Please find enclosed the PCN form, permit drawings, and half-size plan sheets for the above referenced project. A Categorical Exclusion (CE) was completed for this project on June 18, 2007, and distributed shortly thereafter. Additional copies are available upon request. The North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 52 over Deep Creek on SR 1505, in Edgecombe County. The project involves replacement of the existing 111-foot structure with a 120-foot bridge at approximately the same location. The bridge will be constructed with the use of 21 inch prestressed concrete cored slabs. The proposed interior bent will be a concrete cap supported by steel piles. There will be 10 square feet of permanent impacts to Deep Creek and no impacts to its adjacent wetlands. Traffic will be detoured off-site, on surrounding roads, during construction.

Regulatory Approvals

Tar / Pamlico Riparian Buffer Authorization: NCDOT requests that the NCDWQ review this application and issue a written approval for a Tar / Pamlico Riparian Buffer Authorization.

Section 404 / 401 Permit: This project will result in no jurisdictional impacts to Waters of the US. The only impacts to waters of the US consist of hand clearing, which do not require permits under Section 401 and 404 of the Clean Water Act. Therefore we are not requesting Clean Water Act permits.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1334 or
919-715-1335
FAX: 919-715-5501

LOCATION:
PARKER LINCOLN BUILDING
2728 CAPITAL BLVD. SUITE 240
RALEIGH NC 27604

WEBSITE: WWW.NCDOT.ORG

A copy of this application will be posted on the NCDOT website at:
<http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>

Thank you for your time and assistance with this project. Please contact Megan Willis at mswillis@ncdot.gov or (919) 715-1341 if you have any questions or need additional information.

Sincerely,



for Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

W/attachment

Mr. Brian Wrenn, NCDWQ (2 Copies)

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. Richard E. Greene, P.E. Division 4
Mr. Chad Coggins, Division 4
Mr. Scott McLendon, USACE, Wilmington
Mr. William Wescott, USACE, Washington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Mr. Ron Sechler, NMFS
Ms. Anne Deaton, NCDMF
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Natalie Lockhart, PDEA

USACE Action ID No. _____ DWQ No. _____

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

I. Processing

- 1. Check all of the approval(s) requested for this project:

<input type="checkbox"/> Section 404 Permit	<input checked="" type="checkbox"/> Riparian or Watershed Buffer Rules
<input type="checkbox"/> Section 10 Permit	<input type="checkbox"/> Isolated Wetland Permit from DWQ
<input type="checkbox"/> 401 Water Quality Certification	<input type="checkbox"/> Express 401 Water Quality Certification
- 2. Nationwide, Regional or General Permit Number(s) Requested: none
- 3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:
- 4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:
- 5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

II. Applicant Information

- 1. Owner/Applicant Information

Name: Gregory J. Thorpe, Ph.D., Environmental Management Director

Mailing Address: 1598 Mail Service Center

Telephone Number: (919) 733-3141 Fax Number: (919) 733-9794

E-mail Address: _____
- 2. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)

Name: _____

Company Affiliation: _____

Mailing Address: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property

boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: Bridge No. 52 over Deep Creek on SR 1505, in Edgecombe County
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-4504
3. Property Identification Number (Tax PIN): N/A
4. Location
County: Edgecombe Nearest Town: Speed
Subdivision name (include phase/lot number): N/A
Directions to site (include road numbers/names, landmarks, etc.): North from Tarboro on hwy 258, right onto NC 122, left onto SR1505 (Dickens Road), bridge approx 1 mile from NC122 / SR1505 intersection.
5. Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)
Decimal Degrees (6 digits minimum): -77.4167 °N 35.9520 °W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Deep Creek
8. River Basin: Tar / Pamlico
(Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <http://h2o.enr.state.nc.us/admin/maps/>.)
9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: Agricultural (row-crop fields and pasture land)
10. Describe the overall project in detail, including the type of equipment to be used: Replacing a structurally deficient bridge using top-down construction. Standard road building equipment will be used.
11. Explain the purpose of the proposed work: To replace a structurally deficient bridge.

IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. Project let date - March 17, 2009. Wetland delineation was field verified 6-21-07 by William Wescott. JD requested 6-21-07.

V. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application.

n/a

VI. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts:

Permanent Impacts Construction of the proposed project will result in permanent impacts to surface waters totaling 10 ft² due to interior bent installation.

Utility Impacts: There will be no impacts to jurisdictional resources due to the relocation of utilities. Any utility relocations, adjustments, or mechanized clearing performed by the utility companies shall occur outside of the wetland boundaries. If the utility companies install their proposed facilities by directional bore, then bore pits shall be located outside of wetland boundaries.

Hand Clearing: There will be <0.01 acre of hand clearing in wetlands. Hand clearing not considered a jurisdictional impact by William Wescott (ACoE)

2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)
Total Wetland Impact (acres)					

3. List the total acreage (estimated) of all existing wetlands on the property: ~2

4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
Bridge Bents	Deep Creek	Permanent	Perennial	40'	N/a	<0.01
Total Stream Impact (by length and acreage)						<0.01

5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)
N/a				
Total Open Water Impact (acres)				

6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	<0.01
Wetland Impact (acres):	0
Open Water Impact (acres):	0
Total Impact to Waters of the U.S. (acres)	<0.01
Total Stream Impact (linear feet):	0

7. Isolated Waters

Do any isolated waters exist on the property? Yes No

Describe all impacts to isolated waters, and include the type of water (wetland or stream) and the size of the proposed impact (acres or linear feet). Please note that this section only applies to waters that have specifically been determined to be isolated by the USACE.

No Impacts to Isolated waters are proposed

8. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply): uplands stream wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.): n/a

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.): n/a

Current land use in the vicinity of the pond: n/a

Size of watershed draining to pond: _____ Expected pond surface area: _____

VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction techniques to be followed during construction to reduce impacts. Top-down construction, bridge was lengthened, offsite detour utilized, 3:1 fill slopes where practicable, and minimum widths were used for structures and approaches.

VIII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at <http://h2o.enr.state.nc.us/nwetlands/strmgide.html>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.

The proposed impacts do not require compensatory mitigation because hand clearing is not a jurisdictional impact.

2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant's responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are will to accept payment for the mitigation must be attached to this form. For additional information regarding the application process for the NCEEP, check the NCEEP website at <http://h2o.enr.state.nc.us/wrp/index.htm>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): n/a
Amount of buffer mitigation requested (square feet): n/a
Amount of Riparian wetland mitigation requested (acres): n/a
Amount of Non-riparian wetland mitigation requested (acres): n/a
Amount of Coastal wetland mitigation requested (acres): n/a

IX. Environmental Documentation (required by DWQ)

1. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? Yes No
2. If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)?
Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.
Yes No
3. If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter. Yes No

X. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

1. Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 02B .0243 (Catawba) 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify Tar-Pamlico)? Yes No
2. If "yes", identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impact (square feet)	Multiplier	Required Mitigation
1	3561	3 (2 for Catawba)	0
2	1078	1.5	0
Total	4640		0

* Zone 1 extends out 30 feet perpendicular from the top of the near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

3. If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Riparian Buffer Restoration / Enhancement, or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0244, or .0260. n/a

XI. Stormwater (required by DWQ)

Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level. Impervious area will remain approximately the same as that of the existing facility

XII. Sewage Disposal (required by DWQ)

Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility.

N/A

XIII. Violations (required by DWQ)

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?

Yes No

Is this an after-the-fact permit application? Yes No

XIV. Cumulative Impacts (required by DWQ)

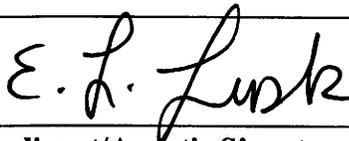
Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes No

If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <http://h2o.enr.state.nc.us/ncwetlands>. If no, please provide a short narrative description: _____
n/a

XV. Other Circumstances (Optional):

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).

Biological conclusions for ESA Threatened and Endangered Species are as follows: Red-cockaded woodpecker – May Effect, Not Likely to Adversely Affect, Tar spiny mussel - May Effect, Not Likely to Adversely Affect. Concurrence from the US Fish and Wildlife Service was received for all species on August 13, 2008.



9.11.08

Applicant/Agent's Signature

Date

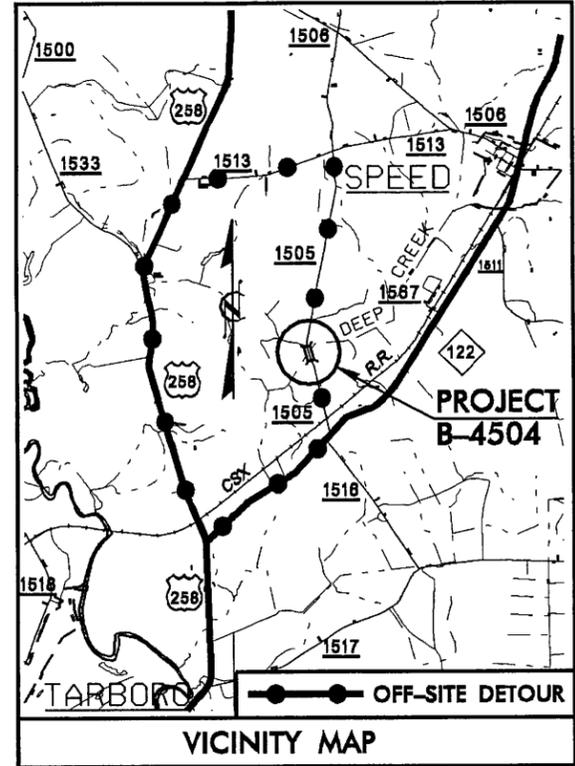
(Agent's signature is valid only if an authorization letter from the applicant is provided.)

09/08/99
 15-MAY-2008 07:50
 f:\hyd\dwg\env\environmental\drawings\b4504_wet_tsh.dgn
 pshppard AT 11/23/94

TIP PROJECT: B-4504

CONTRACT:

See Sheet 1-A For Index of Sheets



STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

EDGECOMBE COUNTY

LOCATION: BRIDGE NO. 52 OVER DEEP CREEK AND APPROACHES ON SR 1505 (DICKENS ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, & STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4504	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33735.1.1	BRZ-1505(3)	P.E.	
33735.2.1	BRZ-1505(3)	RW & UTIL	

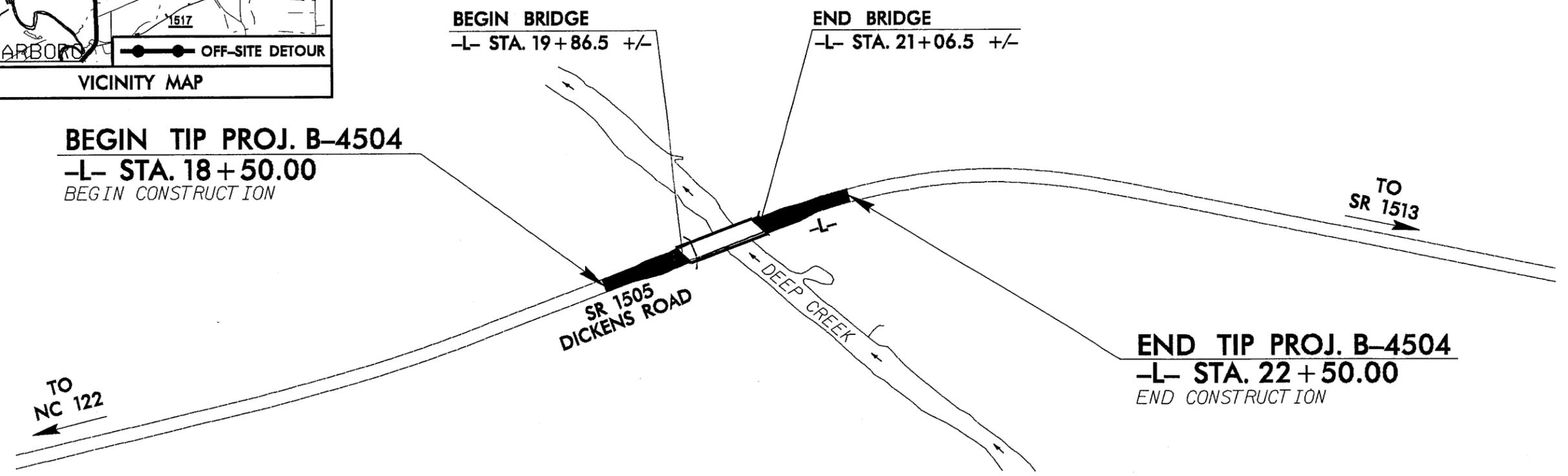
TAR- PAMLICO RIVER BASIN
 WETLAND DRAWINGS
 05/15/2008



BEGIN TIP PROJ. B-4504
 -L- STA. 18+50.00
 BEGIN CONSTRUCTION

BEGIN BRIDGE
 -L- STA. 19+86.5 +/-

END BRIDGE
 -L- STA. 21+06.5 +/-

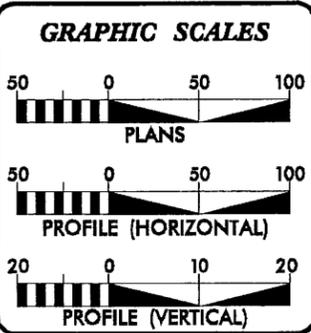


END TIP PROJ. B-4504
 -L- STA. 22+50.00
 END CONSTRUCTION

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDRIES

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2008 =	237
ADT 2030 =	400
DHV =	10 %
D =	60 %
T =	3 %
V =	45 MPH
* TTST	1% + DUAL 2%
FUNC CLASS =	RURAL LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4504 =	0.053 +/- MILES
LENGTH STRUCTURE TIP PROJECT B-4504 =	0.023 +/- MILES
TOTAL LENGTH OF TIP PROJECT B-4504 =	0.076 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
 1000 Birch Ridge Dr., Raleigh, NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 31, 2008	ROGER D. THOMAS, PE PROJECT ENGINEER
LETTING DATE: MARCH 17, 2009	SAMUEL L. ST. CLAIR PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

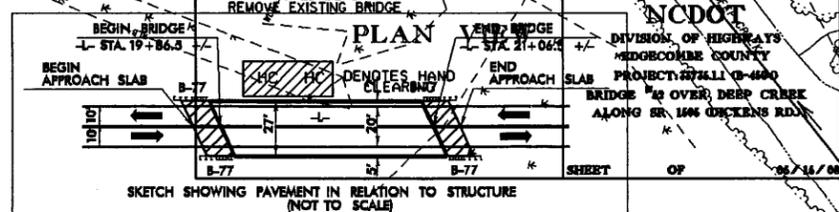
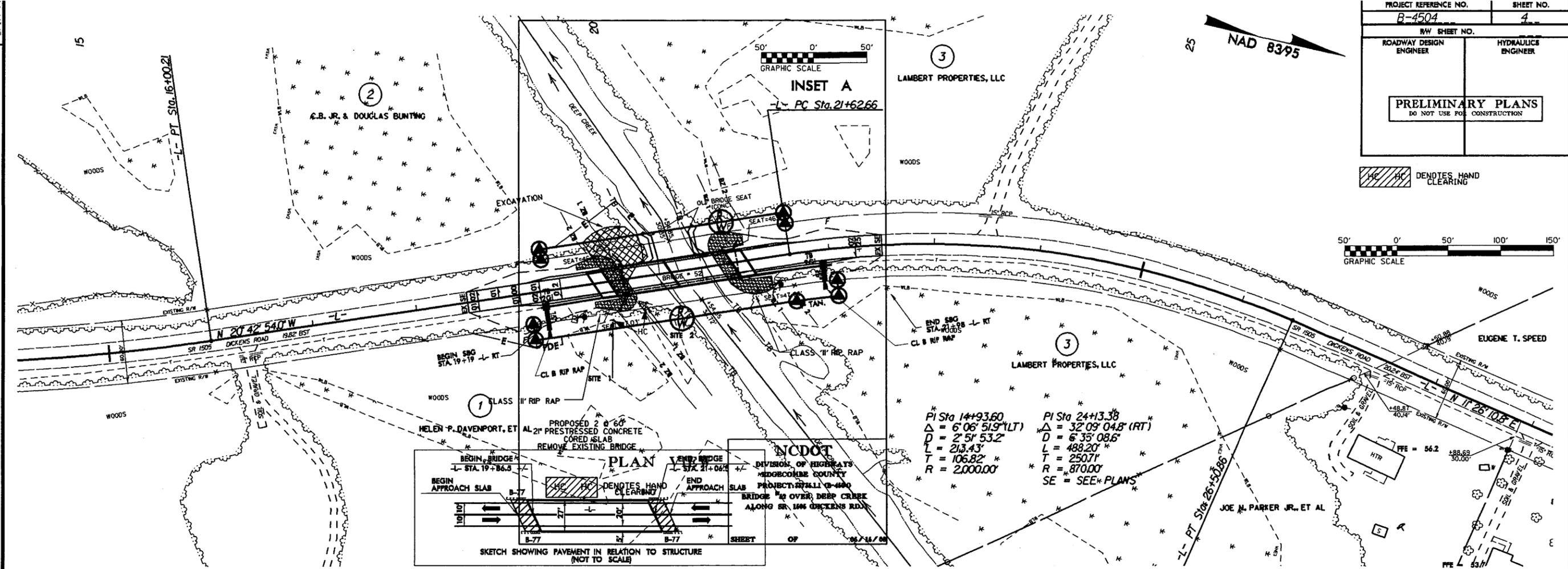
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

Permit Drawing
 Sheet **2** of **6**
 STATE HIGHWAY DESIGN ENGINEER

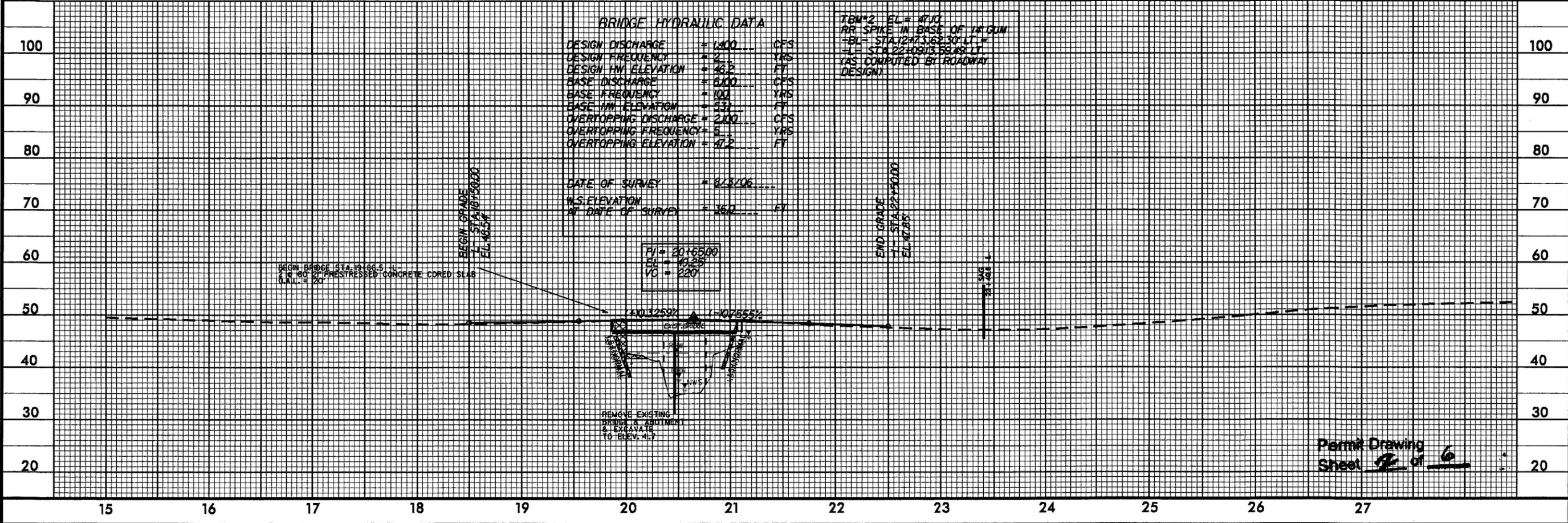
15-MAY-2008 07:48
 r:\hydro\lics\permits\environmental\drawings\4504_hyd_perm_wsl.dwg
 8/17/09

REVISIONS

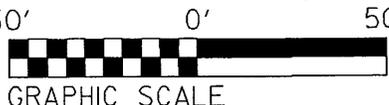
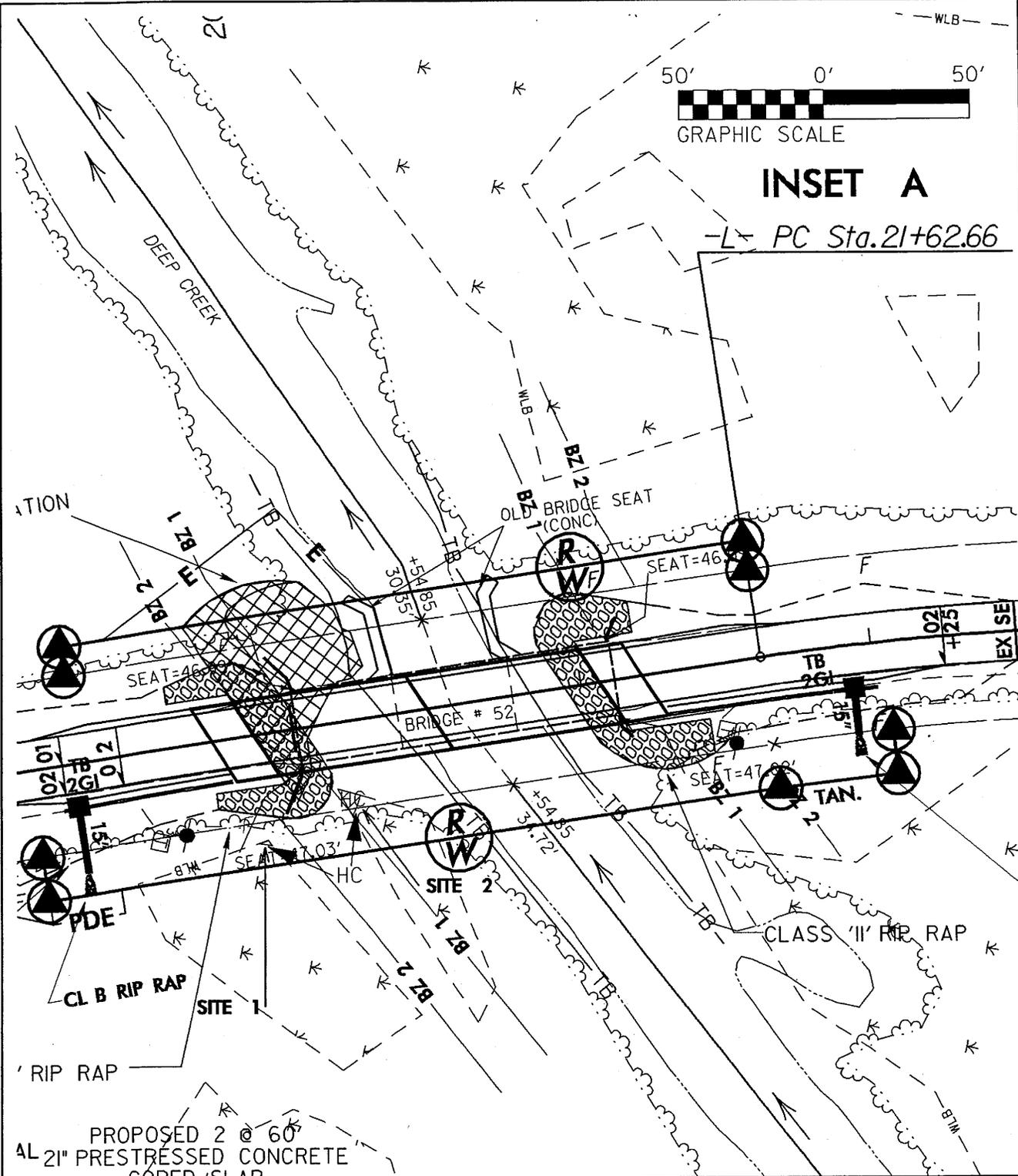


BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS	TBM#2 EL = 47.0
DESIGN FREQUENCY	= 2	YRS	RR SPIKE IN BASE OF TBM
DESIGN HW ELEVATION	= 48.2	FT	BL = STA 12+73.62 30' LT
BASE DISCHARGE	= 600	CFS	LE = STA 22+09.35 45' LT
BASE FREQUENCY	= 100	YRS	(AS COMPUTED BY ROADWAY DESIGN)
BASE HW ELEVATION	= 53.1	FT	
OVERTOPPING DISCHARGE	= 2100	CFS	
OVERTOPPING FREQUENCY	= 5	YRS	
OVERTOPPING ELEVATION	= 47.2	FT	
DATE OF SURVEY	= 8/2/06		
N.S. ELEVATION AT DATE OF SURVEY	= 36.0	FT	



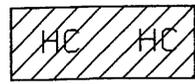
Permit Drawing
 Sheet 6 of 6



INSET A

-L- PC Sta. 21+62.66

PLAN VIEW



DENOTES HAND CLEARING

NCDOT
 DIVISION OF HIGHWAYS
 EDGECOMBE COUNTY
 PROJECT: 33735.1.1 (B-4504)
 BRIDGE #52 OVER DEEP CREEK
 ALONG SR 1505 (DICKENS RD)

Property Owner Contact Report



TIP # B-4504

Owner Last Name/ Business	Owner First Name	Address	City/Town	State	Zip Code	Contact Relationship	Home Phone	Contacted By	Contact Date	How Contacted	Comments
2	Bunting	C. B.	RT 1 Box 144B	Pinetops	NC	27864	Self	K.E.Honeycutt	2-1-05	Letter	
	Cooper	Joseph	908 Dickens Road	Tarboro	NC	27886	Joseph Parker	R.T.Poythress/K.E.Honeycutt	1-20-05	Person/Letter	
	Cooper	Rosa Lee	876 Dickens Road	Tarboro	NC	27886	Joseph Cooper	R.T.Poythress/K.E.Honeycutt	1-20-05	Person/Letter	
1	Davenport, et al	Helen P.	1677 NC 122 N	Tarboro	NC	27886	Helen Davenport	R.T.Poythress/K.E.Honeycutt	1-31-05	Phone/Letter	
	Dew, Jr.	Billy D.	137 Colonial Rd.	Tarboro	NC	27886	Self	K.E.Honeycutt	2-1-05	Letter	
3	Lambert Properties, LLC		P.O.Box 417	Sharpsburg	NC	27878	Self	K.E.Honeycutt	2-1-05	Letter	
	Parker, Jr.	Joe N.	848 Dickens Road	Tarboro	NC	27886	Joseph Cooper	R.T.Poythress/K.E.Honeycutt	1-20-05	Person/Letter	
	Speed, III	Eugene T.	227 Taylor Norton Rd.	Swansboro	NC	28584	Mrs. E.T. Speed, Jr	R.T.Poythress/K.E.Honeycutt	1-31-05	Phone/Letter	

Permit Drawing Sheet 5 of 6

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts (ft)	Natural Stream Design (ft)	
1	19+86 -L- 37 FT. RT						<0.01					
2	20+17 -L- 27 FT. RT						<0.01					
TOTALS:							<0.01					

METHOD III CLEARING WILL BE UTILIZED ALONG THIS PROJECT HOWEVER HAND CLEARING SHOULD BE USED IN THE VICINITY OF THE WETLANDS.

10 SQ. FT. OF SURFACE WATER IMPACTS FOR THE PROPOSED INTERIOR BENT.

Permit Drawing
Sheet 6 of 6

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 EDGECOMBE COUNTY
 WBS - 33735.1.1 (B-4504)

SHEET 9/4/2008

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

EDGEcombe COUNTY

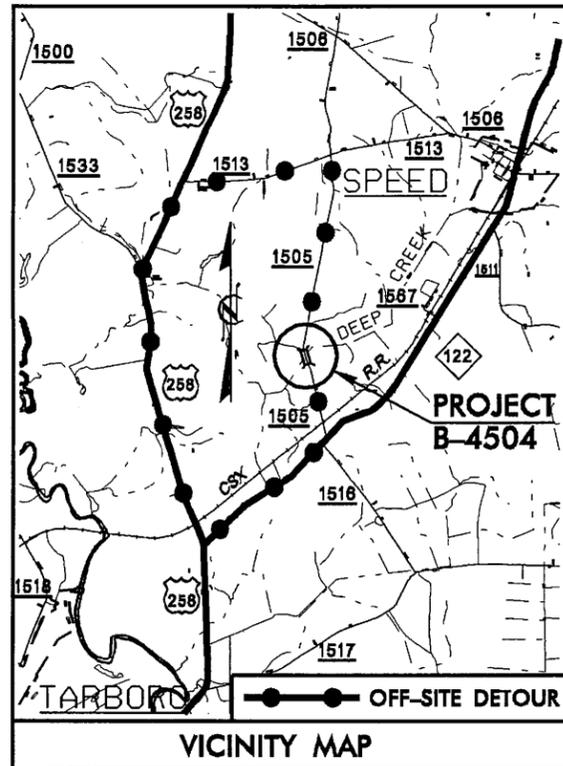
LOCATION: BRIDGE NO. 52 OVER DEEP CREEK AND APPROACHES ON SR 1505 (DICKENS ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, & STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4504	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33735.1.1	BRZ-1505(3)	P.E.	
33735.2.1	BRZ-1505(3)	RW & UTIL	

TAR- PAMLICO RIVER BASIN
RIPARIAN BUFFER ZONE DRAWINGS
05/15/2008

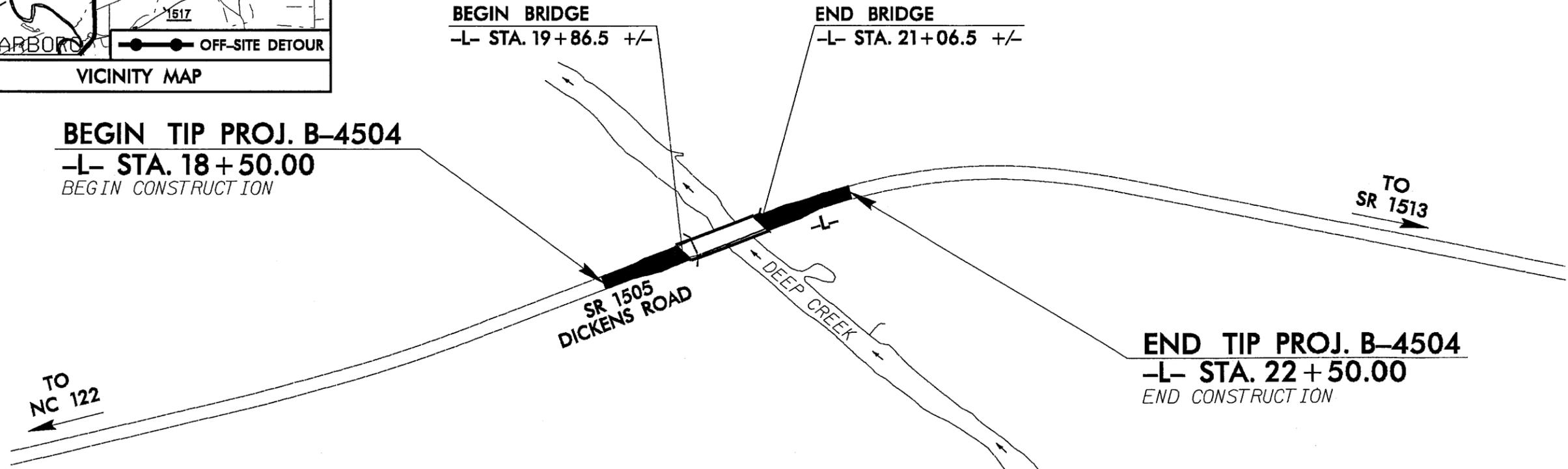
TIP PROJECT: B-4504



BEGIN TIP PROJ. B-4504
-L- STA. 18+50.00
BEGIN CONSTRUCTION

BEGIN BRIDGE
-L- STA. 19+86.5 +/-

END BRIDGE
-L- STA. 21+06.5 +/-



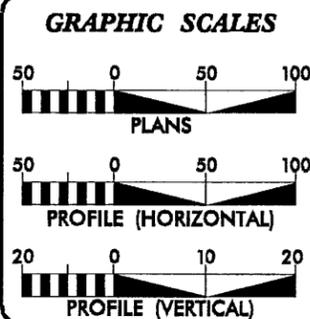
END TIP PROJ. B-4504
-L- STA. 22+50.00
END CONSTRUCTION

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDRIES

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2008 =	237
ADT 2030 =	400
DHV =	10 %
D =	60 %
T =	3 % *
V =	45 MPH
* TTST 1% + DUAL 2%	
FUNC CLASS =	RURAL LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4504 =	0.053 +/- MILES
LENGTH STRUCTURE TIP PROJECT B-4504 =	0.023 +/- MILES
TOTAL LENGTH OF TIP PROJECT B-4504 =	0.076 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh, NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MARCH 31, 2008	ROGER D. THOMAS, PE PROJECT ENGINEER
LETTING DATE: MARCH 17, 2009	SAMUEL L. ST. CLAIR PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

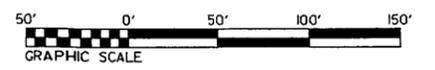
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

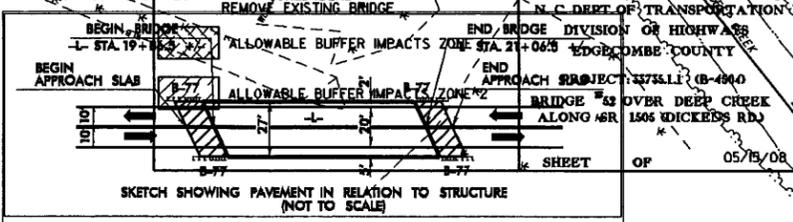
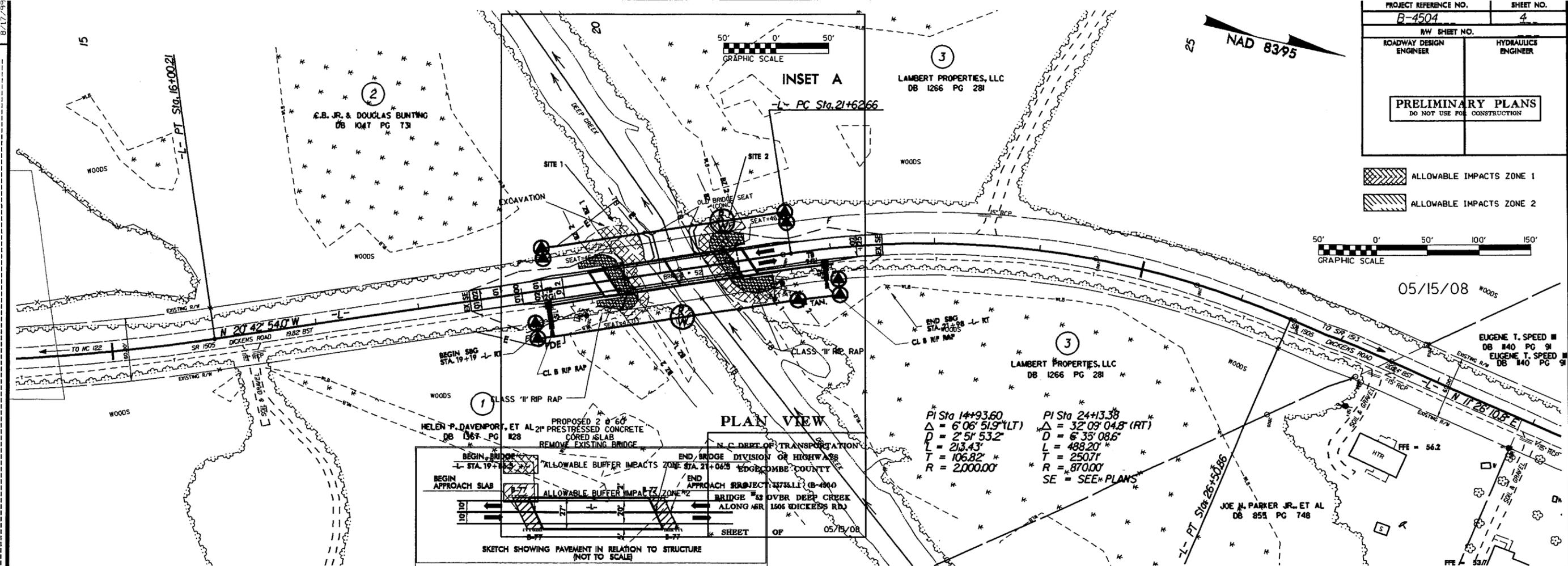
Buffer Drawing
Sheet **1** of **6**
STATE HIGHWAY DESIGN ENGINEER

15-MAY-2008 07:40 r:\hydraulics\permits\environmental\drawings\b4504_rdy_tsh.dgn pshepard AT HY239419

25 NAD 83/95



05/15/08



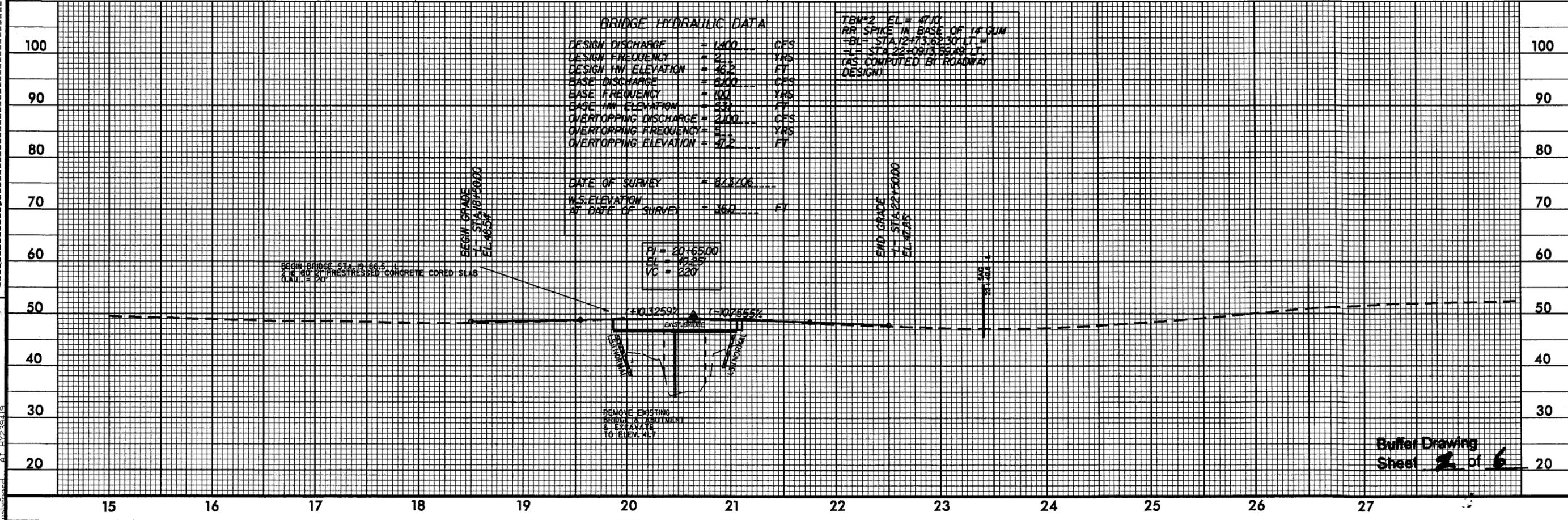
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 46.2	FT
BASE DISCHARGE	= 800	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 53.1	FT
OVERTOPPING DISCHARGE	= 2100	CFS
OVERTOPPING FREQUENCY	= 5	YRS
OVERTOPPING ELEVATION	= 47.2	FT

TBM#2 EL = 47.0
 RR SPIKE IN BASE OF 1" GUN
 -BL- STA 12+73.62 TO LT =
 -L- STA 22+08.13 BLAS LT =
 (AS COMPUTED BY ROADWAY DESIGN)

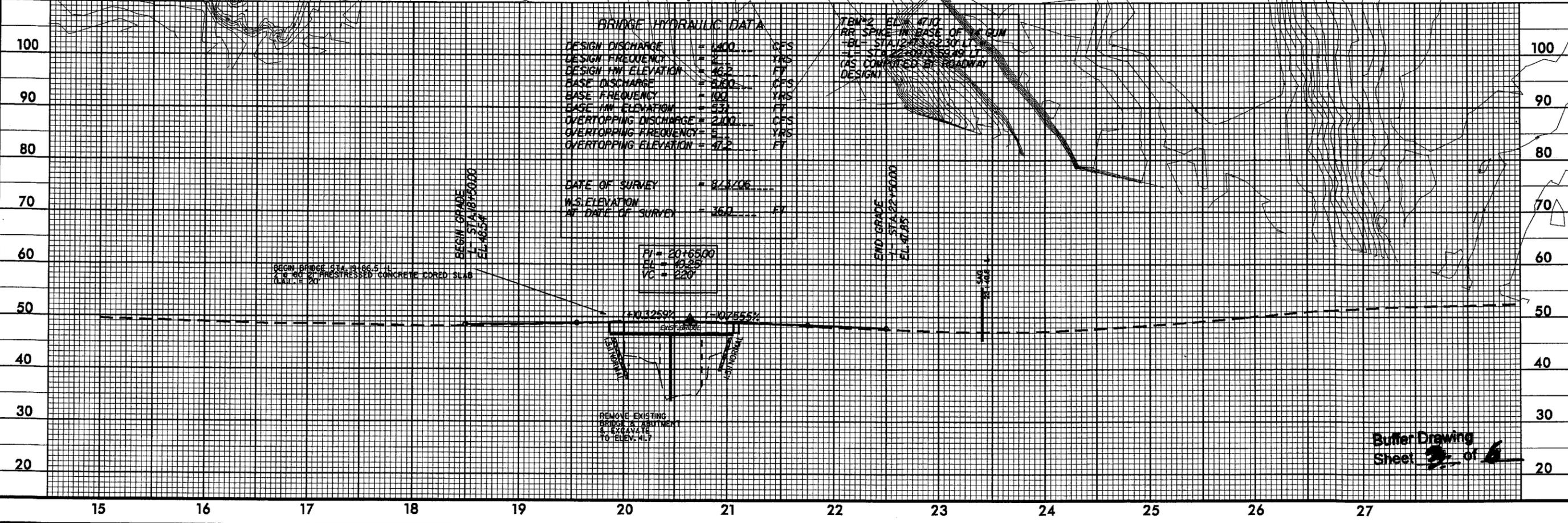
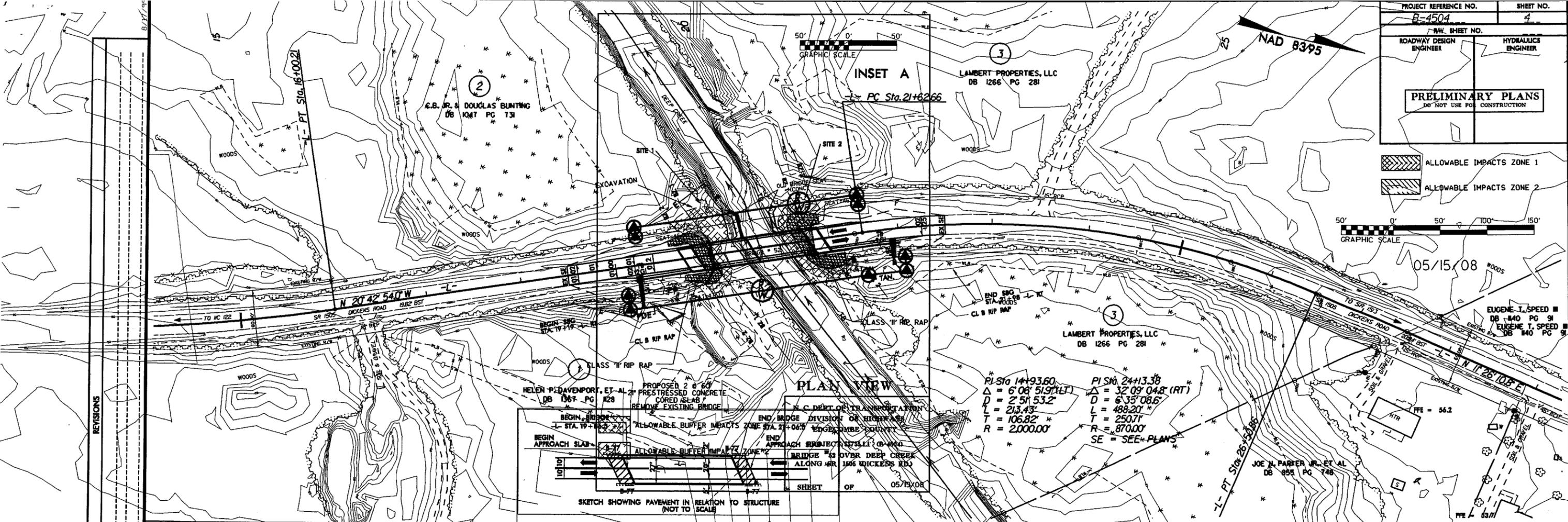
DATE OF SURVEY = 8/3/08
 W.S. ELEVATION AT DATE OF SURVEY = 36.0 FT

PI = 20+65.00
 EL = 46.25
 VC = 220'



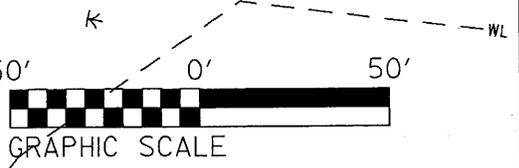
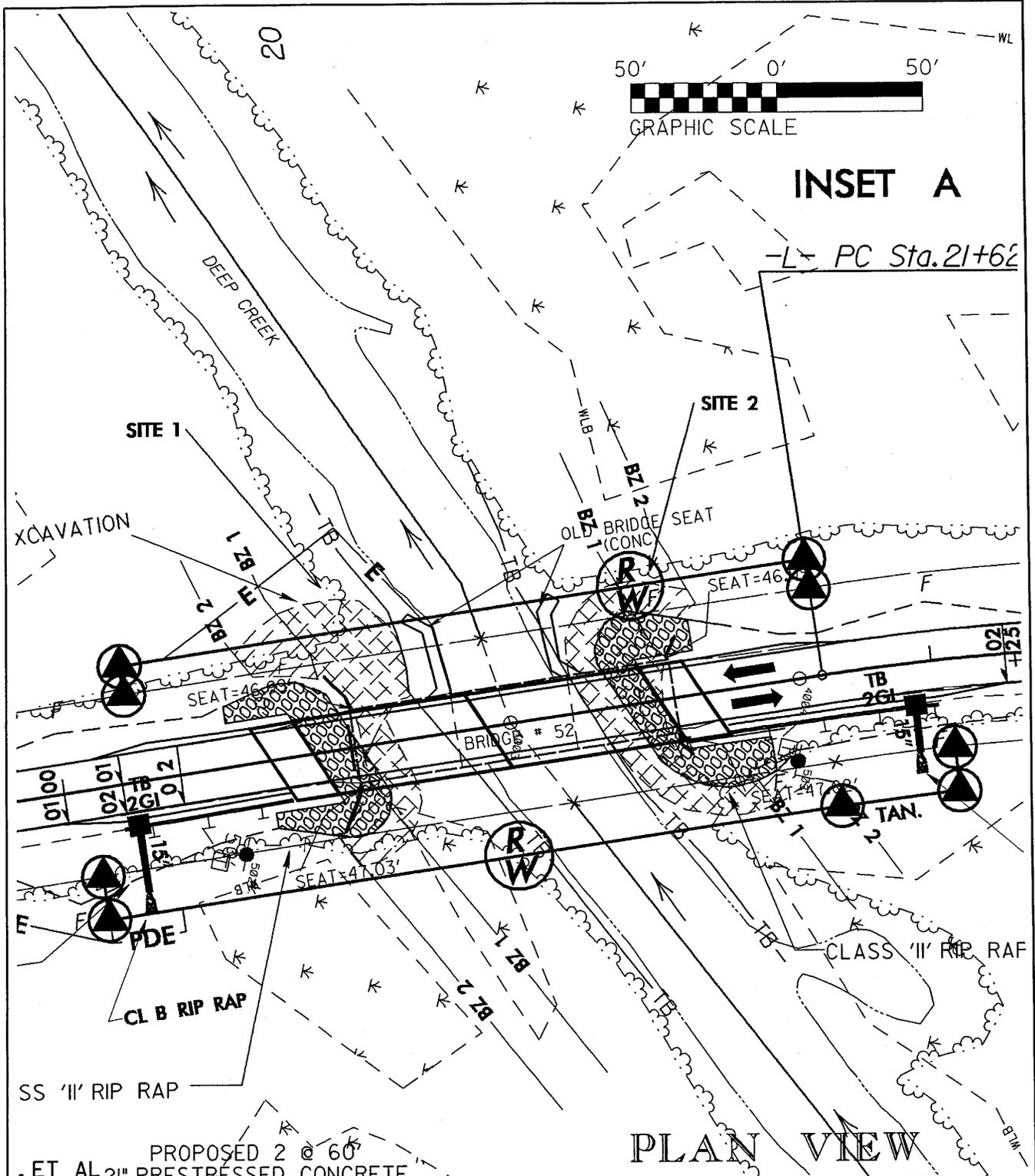
REVISIONS

8/17/99
 15-MAY-2008 07:37
 C:\hobby\projects\environmental\drawings\4504_bud\p\cm_bud\g...



Buffer Drawing
 Sheet 4 of 4

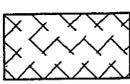
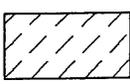
15-MAY-2008 07:37
 r:\hyd\auto\per\m\environmental\dr-ewings\4504_bud.dwg
 15-MAY-2008 07:37
 r:\hyd\auto\per\m\environmental\dr-ewings\4504_bud.dwg
 15-MAY-2008 07:37
 r:\hyd\auto\per\m\environmental\dr-ewings\4504_bud.dwg



INSET A

-L- PC Sta. 21+62

PLAN VIEW

-  ALLOWABLE BUFFER IMPACTS ZONE 1
-  ALLOWABLE BUFFER IMPACTS ZONE 2

N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 EDGEcombe COUNTY
 PROJECT: 33735.1.1 (B-4504)
 BRIDGE #52 OVER DEEP CREEK
 ALONG SR 1505 (DICKENS RD.)



Property Owner Contact Report

TIP # B-4504

Owner Last

Owner Name/ Business	Owner First Name	Address	City/Town	State	Zip Code	Contact/ Relationship	Home Phone	Contacted By	Contact Date	How Contacted	Comments
2 Bunting	C. B.	RT 1 Box 144B	Pinetops	NC	27864	Self		K.E.Honeycutt	2-1-05	Letter	
Cooper	Joseph	908 Dickens Road	Tarboro	NC	27886	Joseph Parker		R.T.Poythress/K. E.Honeycutt	1-20-05	Person/Letter	
Cooper	Rosa Lee	876 Dickens Road	Tarboro	NC	27886	Joseph Cooper		R.T.Poythress/K. E.Honeycutt	1-20-05	Person/Letter	
1 Davenport, et al	Helen P.	1677 NC 122 N	Tarboro	NC	27886	Helen Davenport		R.T.Poythress/K. E.Honeycutt	1-31-05	Phone/Letter	
Dew, Jr.	Billy D.	137 Colonial Rd.	Tarboro	NC	27886	Self		K.E.Honeycutt	2-1-05	Letter	
3 Lambert Properties, LLC		P.O.Box 417	Sharpsburg	NC	27878	Self		K.E.Honeycutt	2-1-05	Letter	
Parker, Jr.	Joe N.	848 Dickens Road	Tarboro	NC	27886	Joseph Cooper		R.T.Poythress/K. E.Honeycutt	1-20-05	Person/Letter	
Speed, III	Eugene T.	227 Taylor Norton Rd.	Swansboro	NC	28584	Mrs. E.T. Speed, Jr		R.T.Poythress/K. E.Honeycutt	1-31-05	Phone/Letter	

Buffer Drawing
Sheet 5 of 6

3/15/06

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for boundaries and property: State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin, Property Corner, Property Monument, Parcel/Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Swamp Marsh, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Utility Easement.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Proposed Wheel Chair Ramp Curb Cut, Curb Cut for Future Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equality Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

Table listing symbols for utilities: POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*); TELEPHONE: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

SANITARY SEWER:

Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

MISCELLANEOUS:

Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.

SURVEY CONTROL SHEET B-4504

PROJECT REFERENCE NO.	SHEET NO.
B-4504	1 C
Location and Surveys	

CONTROL DATA

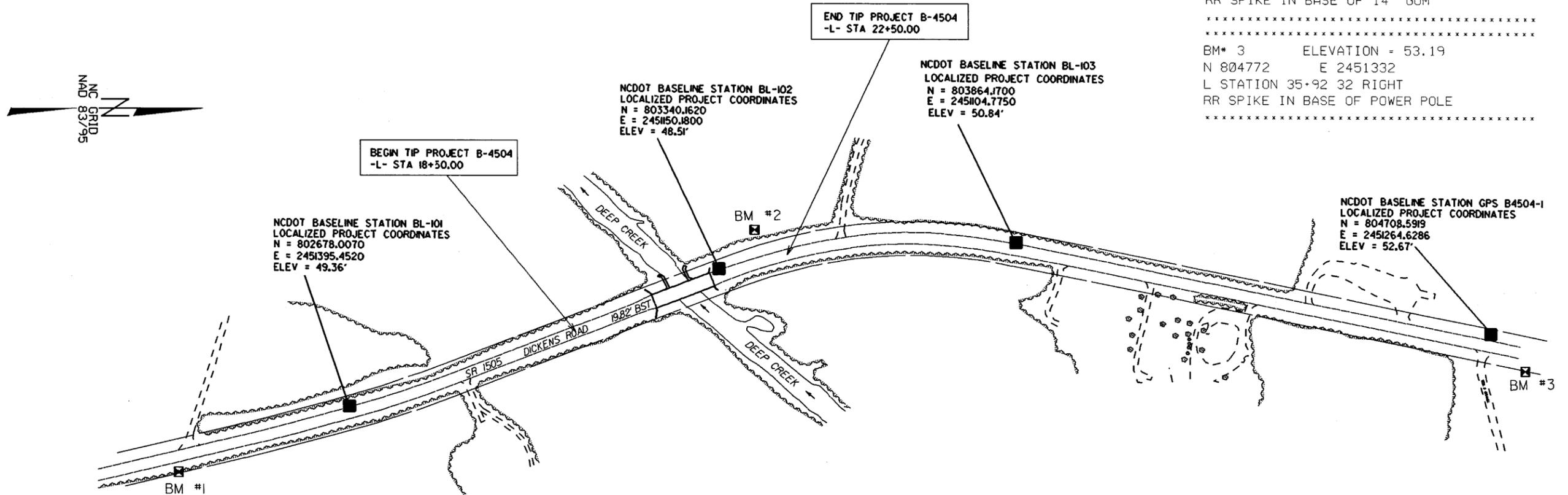
BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
101	BL-101	802678.0070	2451395.4520	49.36	14+23.01	13.51 LT
102	BL-102	803340.1620	2451150.1800	48.51	21+30.55	16.50 LT
103	BL-103	803864.1700	2451104.7750	50.84	26+56.51	11.86 LT
1	GPS B4504-1	804708.5919	2451264.6286	52.67	35+15.93	22.18 LT

BENCHMARK DATA

 BM#1 ELEVATION = 54.32
 N 802375 E 2451513
 L STATION 11+00 27 RIGHT
 RR SPIKE IN BASE OF 10" GUM

 BM# 2 ELEVATION = 47.10
 N 803402 E 2451082
 L STATION 22+09 59 LEFT
 RR SPIKE IN BASE OF 14" GUM

 BM# 3 ELEVATION = 53.19
 N 804772 E 2451332
 L STATION 35+92 32 RIGHT
 RR SPIKE IN BASE OF POWER POLE



NOTES:

THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT](http://www.doh.dot.state.nc.us/preconstruct/highway/location/project/file:B4504_LS_CONTROL_061121.TXT)
 FILE : B4504_LS_CONTROL_061121.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT.
 IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

■ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.

PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
 CONTROL NETWORK FOR B4504 ESTABLISHED FROM NGS ONLINE POSITIONING USER SERVICE (OPUS)

NOTE: DRAWING NOT TO SCALE

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4504-1"
 WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF
 NORTHING: 804708.591(1) EASTING: 2451264.629(1)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT
 (GROUND TO GRID) IS: 0.99995033
 THE N.C. LAMBERT GRID BEARING AND
 LOCALIZED HORIZONTAL GROUND DISTANCE FROM
 "GPS B4504-1" TO -L- STATION 17+50.00 IS
 S 01°11'11" E 1718.91'
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

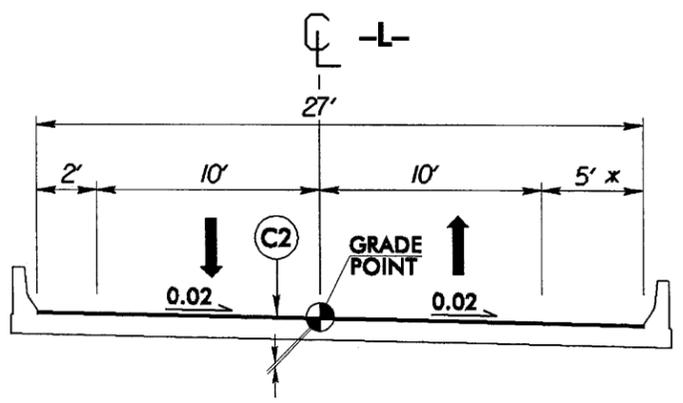
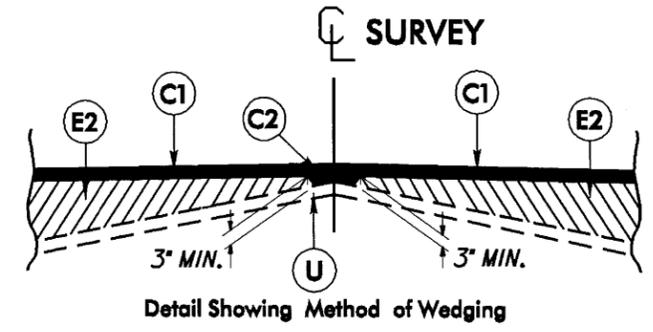
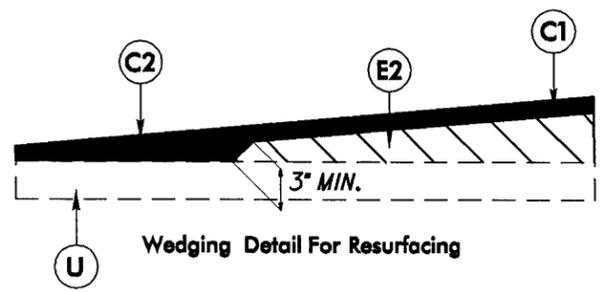
6/2/99
 27-MAY-2008 14:01
 C:\WORKSPACE\4504.dwg
 SURFACE

PAVEMENT SCHEDULE

C1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 3" IN DEPTH.	U	EXISTING PAVEMENT
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 458 LBS. PER SQ. YD.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH.		

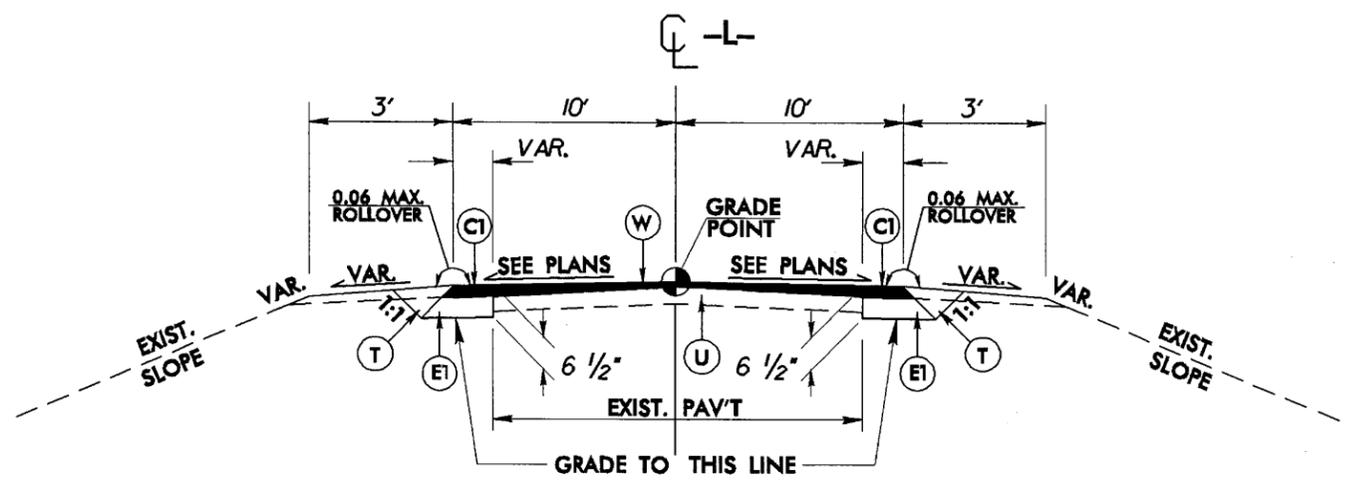
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT REFERENCE NO. B-4504	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PRELIMINARY PLANS	
DO NOT USE FOR CONSTRUCTION	

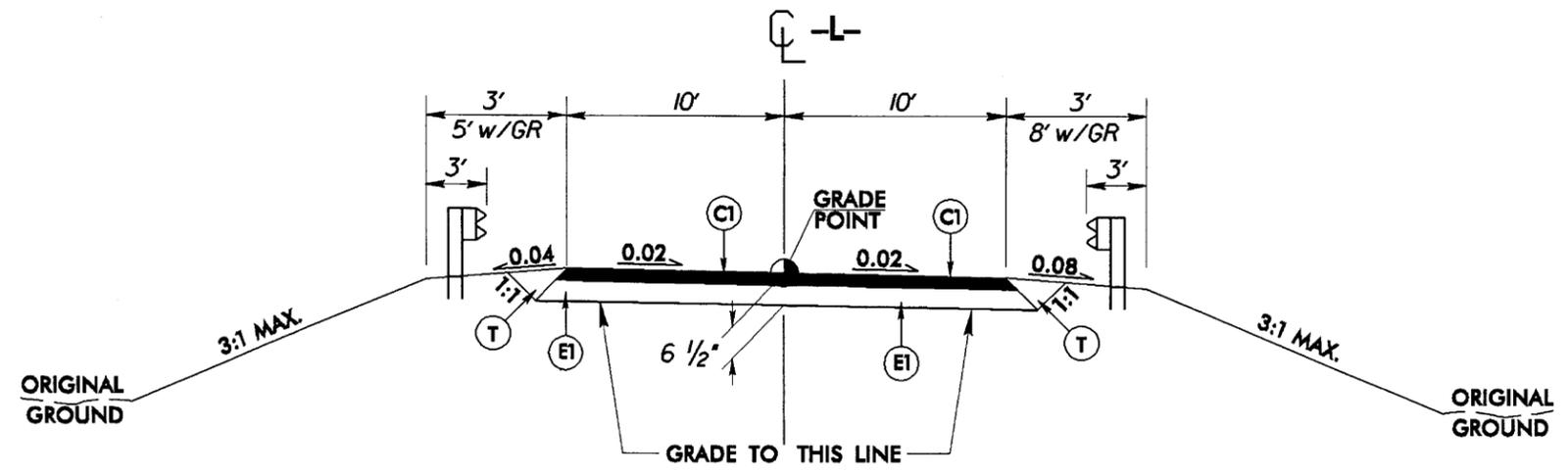


TYPICAL SECTION ON STRUCTURE
 INCLUDES ASPHALT WEARING SURFACE
 FROM -L- STA. 19+86.5 +/- TO 21+06.5 +/-

* ADDITIONAL WIDTH NEEDED TO ACCOMMODATE HYDRAULIC SPREAD



USE TYPICAL SECTION NO. 1
 FROM -L- STA. 18+50.00 TO -L- STA. 19+00.00
 FROM -L- STA. 22+00.00 TO -L- STA. 22+50.00



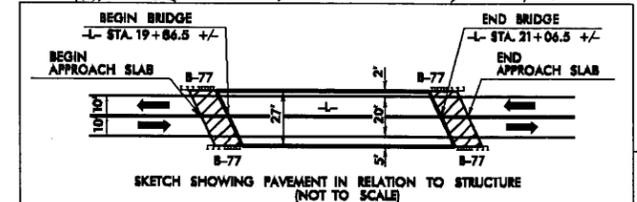
USE TYPICAL SECTION NO. 2
 FROM -L- STA. 19+00.00 TO -L- STA. 19+86.5 +/- (BEGIN BRIDGE)
 FROM -L- STA. 21+06.5 +/- (END BRIDGE) TO -L- STA. 22+00.00

8/17/99

PROJECT REFERENCE NO. B-4504	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

END TIP PROJ. B-4504
-L- STA. 22+50.00
END CONSTRUCTION

BEGIN TIP PROJ. B-4504
-L- STA. 18+50.00
BEGIN CONSTRUCTION



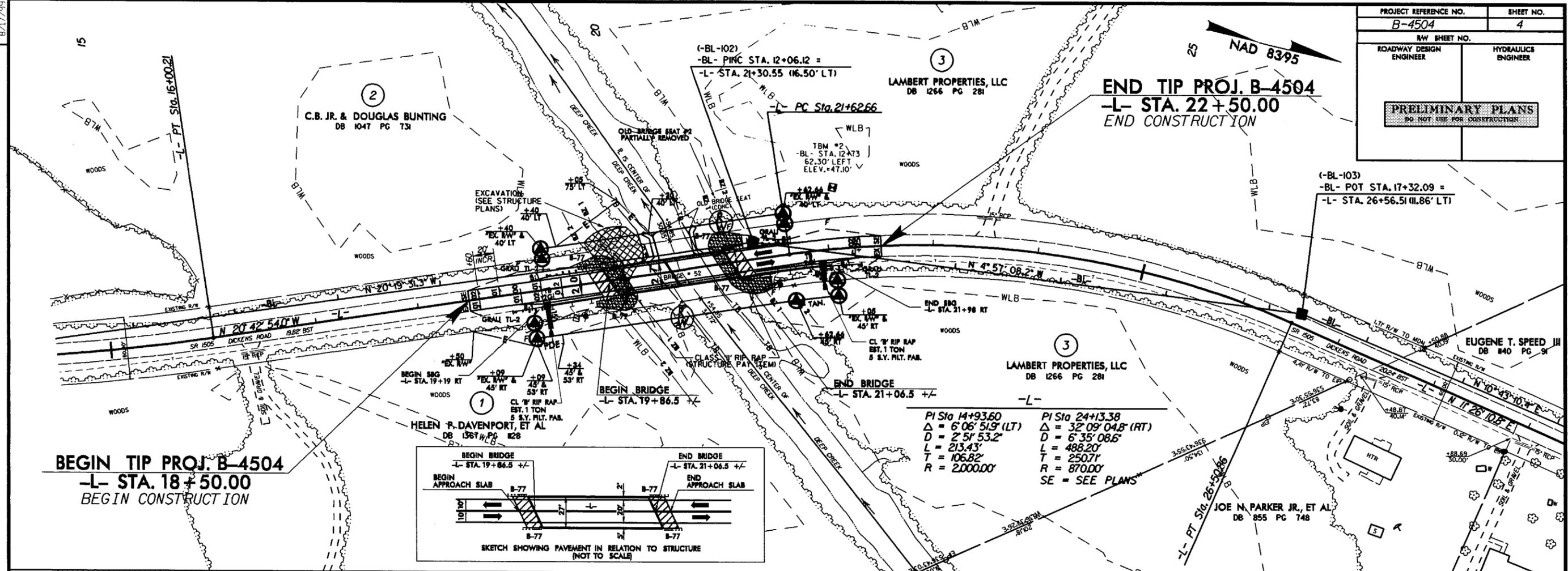
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1,400	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 46.2	FT
BASE DISCHARGE	= 6,100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 53.1	FT
OVERTOPPING DISCHARGE	= 2,100	CFS
OVERTOPPING FREQUENCY	= 5	YRS
OVERTOPPING ELEVATION	= 47.2	FT
DATE OF SURVEY	= 8/3/06	
W.S. ELEVATION AT DATE OF SURVEY	= 36.0	FT

TBM#2 EL = 47.10'
 RR SPIKE IN BASE OF 14" GUM
 -BL- STA. 12+73.62, 30' LT. =
 -L- STA. 22+09.13, 59.49' LT.
 (AS COMPUTED BY ROADWAY DESIGN)

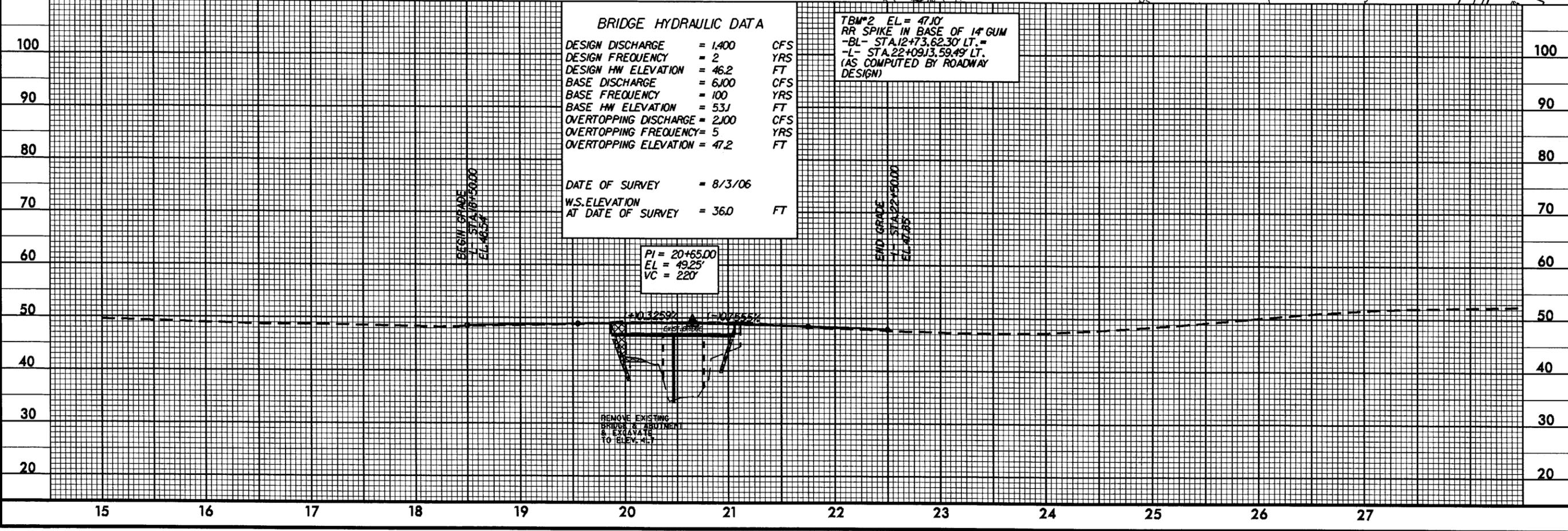
PI = 20+65.00
 EL = 49.25'
 VC = 220'

REMOVE EXISTING BRIDGE & ABUTMENT & EXCAVATE TO ELEV. 4.7

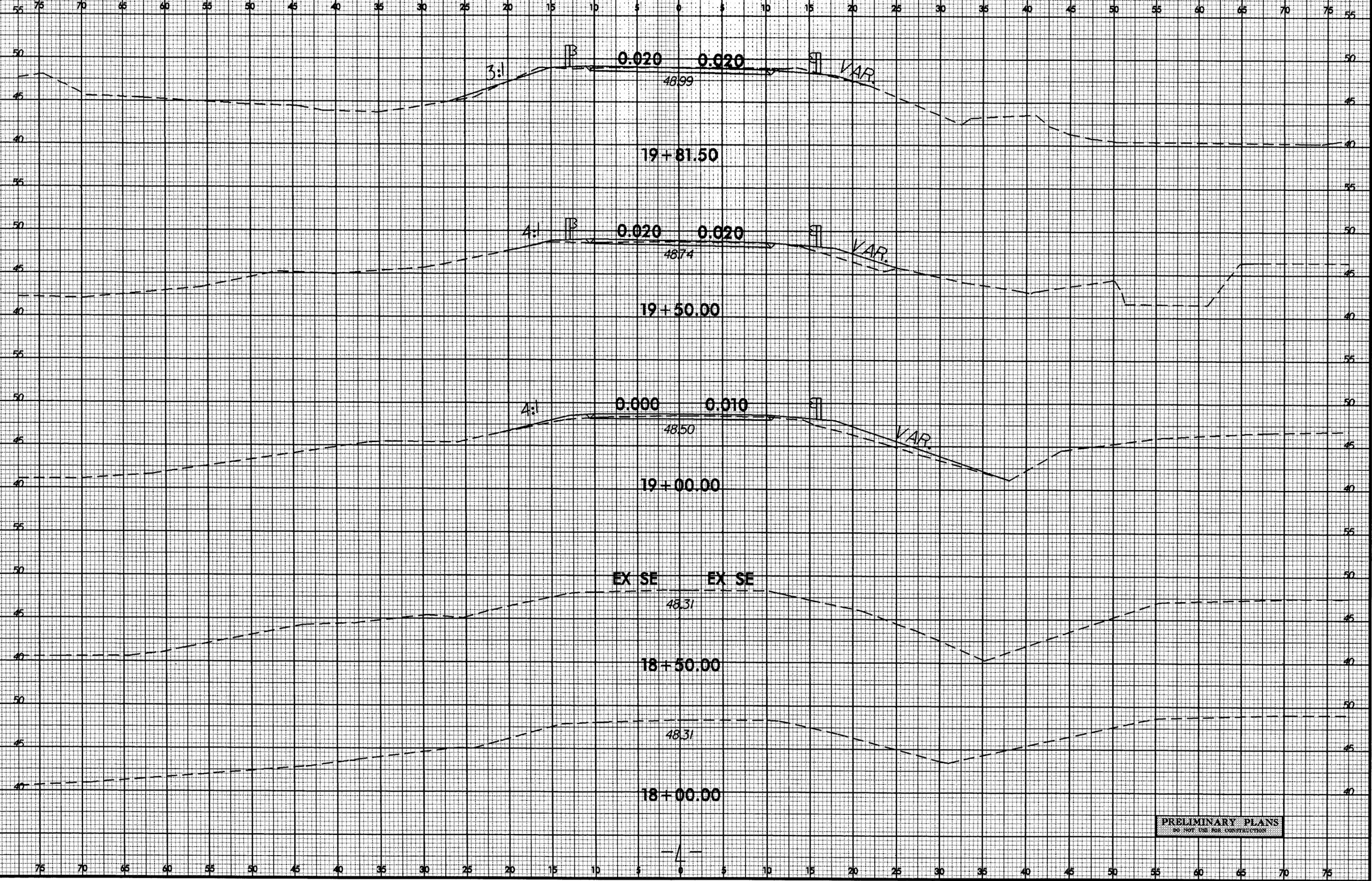


REVISIONS

27-MAY-2008 14:01 R:\Roadway\B-4504_rdy_psh4.dgn



8/23/99



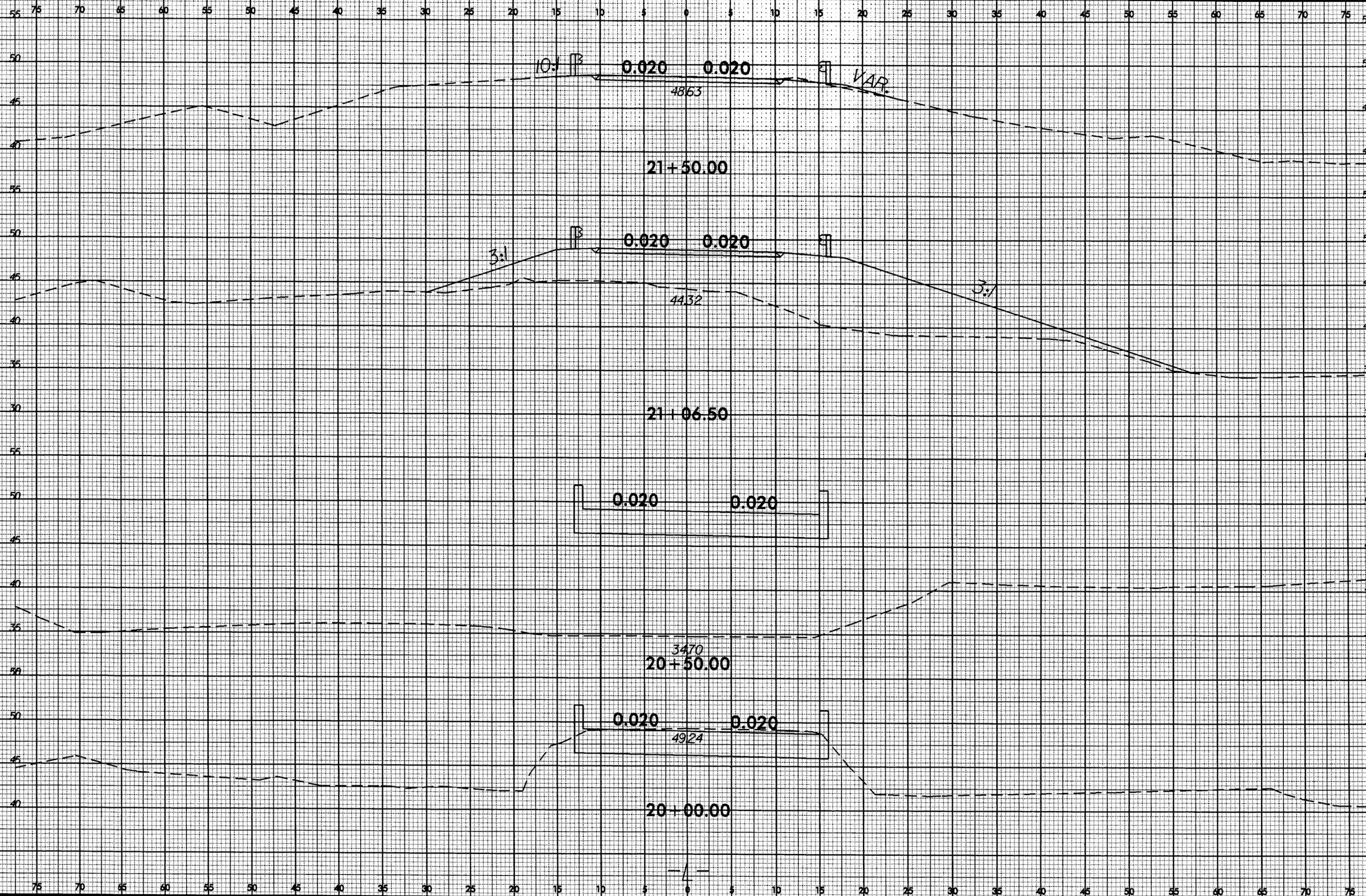
27-MAY-2008 14:01
S:\SUBWAY\4504-rdy-xp1.1.dgn

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

8/23/99

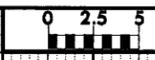


PROJ. REFERENCE NO. B-4504 SHEET NO. X-2



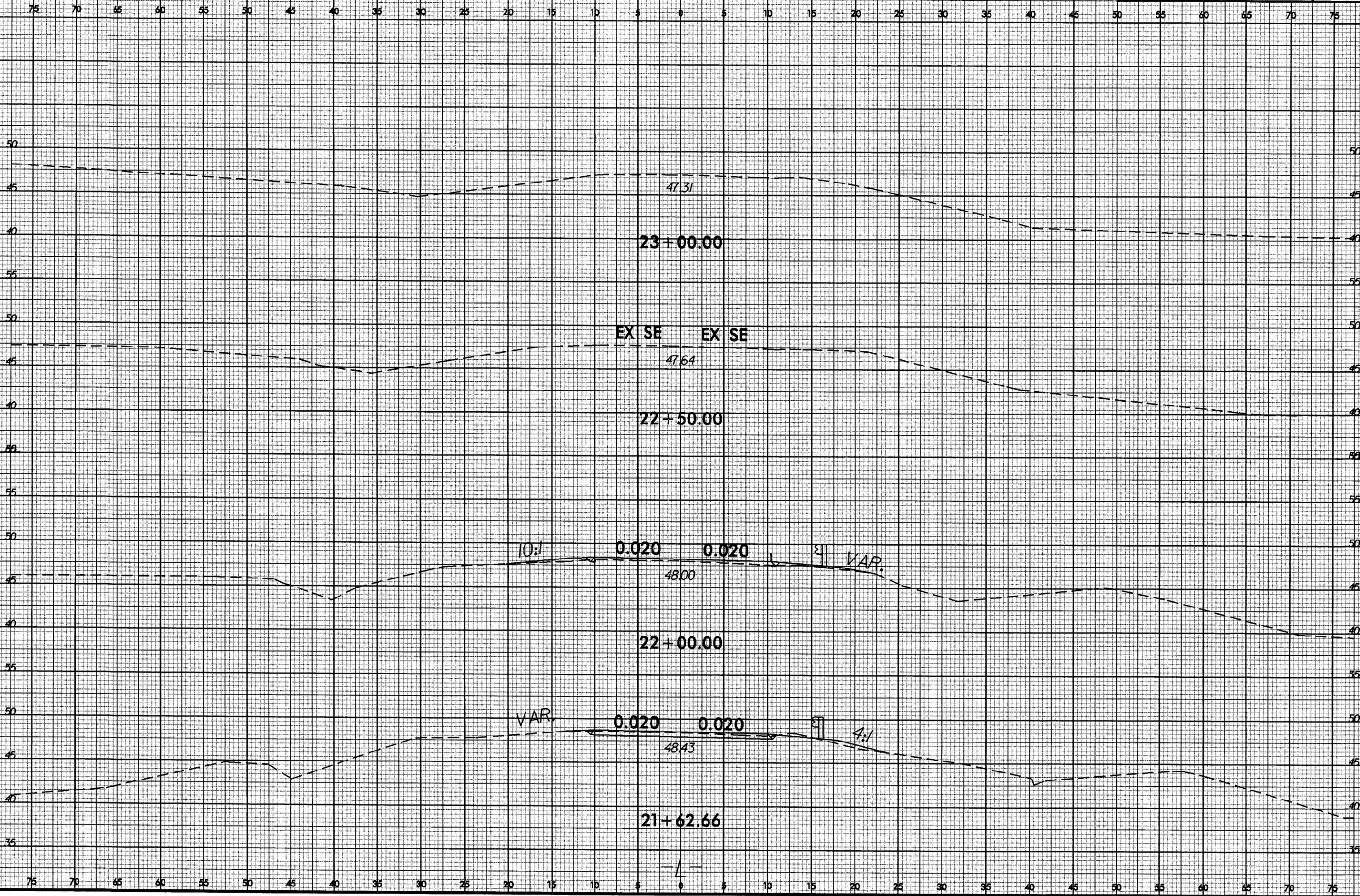
27-MAY-2008 14:01 P:\Road\RDY\SC\B4504-r.dwg xp1.l.dgn

8/23/99



PROJ. REFERENCE NO.
B-4504

SHEET NO.
X-3



27-MAY-2008 14:01
 P:\PROJECTS\B-4504-rd-j-rpl.dgn
 \$\$\$SUSERRAME\$\$\$